WHAT IS CLAIMED IS:

1. A computer-based method of determining marginal values for individual resources, the method comprising:

loading data related to individual resources and associated composite resources from a resource revenue management system into a marginal value system, wherein the individual resources include human-factor resources, and wherein the associated composite resources each include a collection of at least two of the individual resources;

constructing internal data structures, in the marginal value system, which link each of the individual resources to their associated composite resources and link each of the composite resources to their associated individual resources;

determining marginal values, in the marginal value system, for the individual resources with a continuous optimization function using the internal data structures; and

storing the marginal values from the marginal value system into the resource revenue management system.

2. The method according to claim 1, where the step of determining further comprises:

evaluating a locally optimal marginal value for the individual resources with the continuous optimization function on each of the individual resources; and

performing the step of evaluating in successive iterations until a globally optimal marginal value is evaluated for the individual resources based on a convergence criterion.

3. The method according to claim 2 further comprising:

monitoring, in the marginal value system, a maximum difference between locally optimal marginal values evaluated during a current iteration and locally optimal marginal values evaluated during a previous iteration;

comparing, in the marginal value system, the maximum difference and the convergence criterion upon completion of the current iteration, where the convergence is satisfied when the maximum difference is less than the convergence criterion.

4. The method according to claim 1, where the step of determining further comprises:

evaluating a locally optimal marginal value for one of the individual resources with the continuous optimization function; and

performing the step of evaluating in successive iterations for another of the individual resources until a locally optimal marginal value has been evaluated for all of the individual resources.

5. The method according to claim 4 further comprising:

determining, in the marginal value system, the absolute difference between a locally optimal marginal value evaluated for one of the individual resources during a current iteration and a locally optimal marginal value evaluated for the individual resource during a previous iteration;

comparing, in the marginal value system, the absolute difference to a maximum difference between the locally optimal marginal value evaluated for another of the individual resources during the current iteration and the locally optimal marginal value evaluated for the individual resource during the previous iteration, wherein the maximum difference equals or exceeds all absolute differences between the locally optimal marginal values evaluated for all other individual resources during a current iteration and the locally optimal marginal values evaluated for the individual resources during a previous iteration; and

replacing the maximum difference with the absolute difference when the absolute difference is greater than the maximum difference.

6. The method according to claim 1, further comprising:

loading resource value data comprising a supply of the individual resources and a set of resource prices from the resource revenue management system into the marginal value system; and

constructing an internal data structure for linking each of the composite resources to their associated set of resource prices and for linking each of the individual resources to their associated supply.

7. The method according to claim 6, wherein the continuous optimization function is a deterministic optimization function, the step of determining further comprising evaluating locally optimal marginal values based on a certain demand for each of the composite resources.

8. The method according to claim 7, where the deterministic optimization function is a supply-demand balance optimization function comprising:

searching for a marginal value for one of the composite resources where the supply substantially equals the demand for the one composite resource.

9. The method according to claim 8, further comprising:

determining the difference between the supply and the certain demand for the one composite resource; and

setting the marginal value for the one composite resource to indicate that the supply exceeds the demand when the difference is positive.

10. The method according to claim 8, further comprising:

determining the certain demand for one human-factor resource based on the marginal values for other of the individual resources contained in each of the composite resources containing the one human-factor resource.

11. The method according to claim 10, further comprising:

determining a composite resource demand for each of the composite resources containing the one human-factor resource; and

adding the composite resource demand for each of the composite resources to the certain demand for the one human-factor resource.

12. The method according to claim 11, further comprising:

adding the marginal value for each of the individual resources contained in one of the composite resources to a total marginal value; and

determining the composite resource demand for the one composite resource using the total marginal value.

13. The method according to claim 12, wherein each of the set of resource prices comprises a corresponding demand point on a demand curve, and wherein the method further comprises:

searching for the first demand point on the demand curve corresponding to a resource price that exceeds the total marginal value;

determining a linear average between the first demand point and a second demand point previous to the first demand point; and

determining the composite resource demand based on an intersection of the supply and the linear average.

14. The method according to claim 6, wherein the continuous optimization function is a non-deterministic optimization function, the step of determining further

comprising evaluating locally optimal marginal values based on an uncertain demand for each of the composite resources.

15. The method according to claim 14, wherein the continuous optimization function is a non-deterministic optimization function based on a supply of each of the individual resources and an uncertain demand for the composite resources.

16. The method according to claim 15, wherein the non-deterministic optimization function is an expected marginal resource revenue (EMRR) optimization function comprising:

searching for a marginal value for one of the composite resources where the supply substantially matches a protection level for the one composite resource.

17. The method according to claim 16, further comprising:

loading resource value data further comprising a set of means and a set of variances from the resource revenue management system into the marginal value system, wherein the set of means and the set of variances correspond to the set of resource prices; and

constructing an internal data structure for linking each of the composite resources to their associated set of means and set of variances.

18. The method according to claim 16, further comprising:

creating a demand point list for the one resource containing a set of demand points corresponding to each of the set of resource prices;

determining an accumulated mean, an accumulated net resource revenue and an accumulated variance based on the set of resource prices, the set of means and the set of variances for each demand point in the demand point list;

determining an updated average net resource revenue based on the accumulated net resource revenue and the accumulated mean; and

determining the protection level for each of a set of accumulated demand points using the accumulated mean, the accumulated variance and the average net resource revenue for each demand point in the demand point list.

19. The method according to claim 18, where the demand point list is determined by:

accumulating the marginal values for all of the individual resources in a composite resource containing the one human-factor resource except for the marginal value for the one composite resource for each of the set of resource prices;

determining a net resource revenue for each demand point in the demand point list using the accumulated marginal values; and

creating a new demand point when the net resource revenue is positive.

20. The method according to claim 19, further comprising:

setting the net resource revenue to the difference of the corresponding resource price minus the accumulated marginal values.

21. The method according to claim 18, further comprising:

determining the accumulated mean comprising a summation of each mean in the set of means for each of the set of demand points;

determining the accumulated net resource revenue comprising a summation of each of the set of resource prices multiplied by each of the means in the set of means for each of the set of demand points; and

determining the accumulated variance comprising a summation of each variance in the set of variances for each of the set of demand points.

22. The method according to claim 18, further comprising:

determining the updated average net resource comprising the quotient of the accumulated net resource revenue divided by the accumulated mean.

23. The method according to claim 18, further comprising:

determining a standard deviation equaling a square root of the accumulated variance;

determining an inverse cumulative normal of the equation: (1-NNRR/ANRR), where NNRR corresponds to next net resource revenue for a demand point in the demand point list and ANRR corresponds to the average net resource revenue for each demand point in the demand point list; and

setting the protection level to the sum of the accumulated mean plus the inverse cumulative normal multiplied by the standard deviation.

24. A computer-based marginal value system coupled to a computer-based resource revenue management system, the computer-based marginal value system comprising:

an input device configured to receive data related to individual resources and associated composite resources from the resource revenue management system, wherein the individual resources include human-factor resources, and wherein the associated composite resources each include a collection of at least two of the individual resources;

at least one processor configured to construct internal data structures which link each of the individual resources to their associated composite resources and link each of the composite resources to their associated individual resources, and to determine marginal values for the individual resources with a continuous optimization function using the internal data structures; and

memory storing the data related to the individual resources and the associated composite resources, the internal data structures, and at least one program for controlling the at least one processor.

25. A method of producing a marginal value representing currency determined using a computer-based marginal value system for use in a computer-based resource revenue management system for granting and denying a sale of one or more

composite resources, comprising at least one human-factor resource, being made unavailable at a future time depending on marginal values for each of such composite resources received from the computer-based resource revenue management system, the method comprising:

loading data for human-factor resources, composite resources, and a resource value from the computer-based resource revenue management system into the computer-based marginal value system;

constructing internal data structures for the human-factor resources, composite resources, and resource value;

determining marginal values for the human-factor resources using a continuous optimization function; and

storing the marginal values from the computer-based marginal value system into the computer-based resource revenue management system.

26. A computer-based method of determining marginal values for human-factor resources, the method comprising:

loading data related to individual resources and associated composite resources from a resource revenue management system into a marginal value system, wherein the individual resources include human-factor resources, and wherein the associated composite resources each include a collection of at least two of the individual resources;

constructing internal data structures, in the marginal value system, which link each of the individual resources to their associated composite resources and link each of the composite resources to their associated individual resources;

evaluating a locally optimal marginal value for one of the human-factor resources using a continuous optimization function dependent on the marginal values for other of the individual resources; and

iteratively reevaluating the locally optimal marginal value until a globally optimal marginal value is attained for the one of the human-factor resources.

27. The method according to claim 26, further comprising:

iteratively performing the step of evaluating a locally optimal marginal value for each of the individual resources until a locally optimal marginal value is attained for each of the individual resources.

28. The method according to claim 26, wherein the continuous optimization function is a supply demand balance optimization function comprising:

determining whether a supply for the one of the human-factor resources minus a demand for the one of the human-factor resources is positive; and

searching for the locally optimal marginal value that makes the supply equal the demand.

29. The method according to claim 26, where the continuous optimization function is an expected marginal resource revenue optimization function comprising:

creating a demand point list for the one of the human-factor resources based on a set of resource prices, means and variances associated with each of the composite resources containing the one of the human-factor resources;

determining a protection level for each demand point in the demand point list; and

searching for the locally optimal marginal value that makes the supply equal the protection level.

30. A marginal value system for determining marginal values for human-factor resources, comprising:

computerized means for evaluating a locally optimal marginal value for one of the human-factor resources using a continuous optimization function dependent on the marginal values for other resources; and

computerized means for iteratively reevaluating the locally optimal marginal value until a globally optimal marginal value is attained for the one of the human-factor resources.

31. A computer-based method for yield management, comprising:

determining transaction parameter values for composite resources having at least one human-factor resource which includes a transaction price calculated using yield management techniques; and

communicating the transaction parameter values for at least one composite resource to at least one potential user of the composite resource.

32. A computer-based yield management system comprising:

means for determining transaction parameter values for composite resources having at least one human-factor resource which includes a transaction price calculated using yield management techniques; and

means for communicating the transaction parameter values for at least one composite resource to at least one user.

33. A yield management system comprising:

a storage device storing a program; and

a processor connected to the storage device and controlled by the program, the processor operative with the program to determine transaction parameter values for composite resources having at least one human-factor resource which includes an offer price calculated using yield management techniques, and to communicate the transaction parameter values for at least one composite resource to at least one user.

34. A computer-readable medium containing program instructions for controlling a computer to perform a method comprising:

receiving data related to individual resources and associated composite resources, wherein the individual resources include human-factor resources, and wherein the associated composite resources each include a collection of at least two of the individual resources;

storing the data related to the individual resources and the associated composite resources;

constructing internal data structures which link each of the individual resources to their associated composite resources and link each of the composite resources to their associated individual resources; and

determining transaction parameter values using the internal data structures for one of the composite resources having at least one human-factor resource which includes a transaction price calculated with yield management techniques.

35. A computer-based method for producing composite resource transactions, the method comprising:

determining transaction parameter values for composite resources having at least one human-factor resource which includes an offer price calculated using yield management techniques;

communicating the transaction parameter values for at least one composite resource to at least one user; and

receiving a responding communication from at least one user binding at least one composite resource with specified transaction parameter values.